

TRANSPORTATION PROJECT REPORT

DRAFT DESIGN REPORT / DRAFT ENVIRONMENTAL IMPACT STATEMENT / DRAFT 4(f) EVALUATION

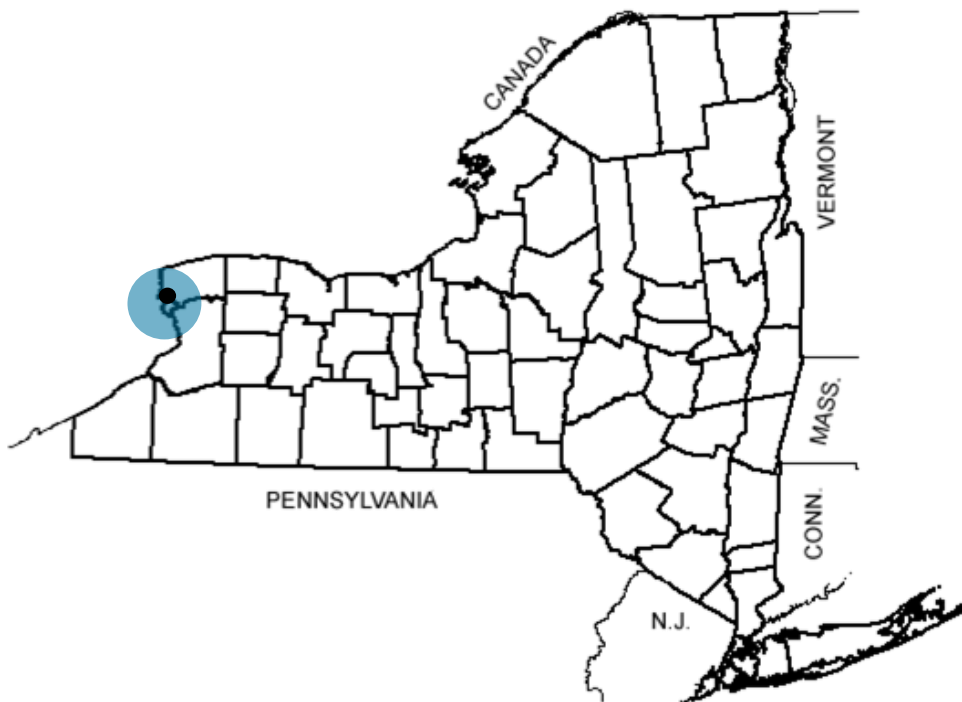
APPENDIX F

Non-Standard Feature Justifications

November 2016

PIN 5470.22

NYS Route 198 (Scajaquada Expressway Corridor)
Grant Street Interchange to Parkside Avenue Intersection
City of Buffalo
Erie County



ANDREW M. CUOMO
Governor

Department of
Transportation

MATTHEW J. DRISCOLL
Commissioner



U.S. Department of Transportation
Federal Highway Administration

EXHIBIT 3.3.3.2 (1) - 1
NON-STANDARD FEATURE JUSTIFICATION
(in accordance with [HDM §2.8](#))

| | | | |
|-------------------|----------------|------------------------------|--------------------------------|
| PIN: | 5470.22 | NHS (Y/N): | Yes |
| Route No. & Name: | NYS Route 198 | Functional Classification: | Urban Principal Arterial Other |
| Project Type: | Reconstruction | Design Classification: | Urban Arterial |
| % Trucks: | 2% to 5% | Terrain: | Rolling |
| ADT: | 40,000 (max) | Truck Access/Qualifying Hwy. | Qualifying |

a. - Description of Non-Standard Feature

| | | | |
|--|---------------|--------------------|--------|
| Type of Feature (e.g., horizontal curve radius): | Lane Width | | |
| Location: | NYS Route 198 | | |
| Standard Value: | 12 feet | Design Speed: | 35 mph |
| Existing Value: | 11 feet | Recommended Speed: | 35 mph |
| Proposed Value: | 11 feet | Recommended Speed: | 35 mph |

b. - Accident Analysis

| | | | |
|--|---|--|--|
| Current Accident Rate: | 0.56-4.57 acc/mvm (based on data from October 2011 to September 2014) | | |
| Statewide Rate: | 1.06 acc/mvm | | |
| Is the non-standard feature a contributing factor? | No | | |
| Anticipated Accident Rates, Severity, and Costs: | Based upon available data from June to October 2015, since the posted speed limit was reduced to 30 mph, the number of accidents has decreased by more than 50%. Assuming that trend continues, no other appreciable change in accident frequency, severity, or costs is anticipated. Retaining the existing non-standard feature would be consistent with the project goals and objectives which seek to change the character of the roadway from an urban expressway to an urban boulevard. | | |

c. - Cost Estimates

| | |
|---------------------------------------|----------------|
| Cost to Fully Meet Standards: | \$500,000 |
| Cost(s) For Incremental Improvements: | Not Applicable |

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):

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|------|
| None |
|------|

e. - Compatibility with Adjacent Segments & Future Plans:

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|---|
| 11 ft is consistent with the width on adjacent segments of NYS Route 198. There are no future plans to widen NYS Route 198. |
|---|

f. - Other Factors (e.g., Social, Economic & Environmental):

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|--|
| Widening the travel lanes by 1 ft would increase the total width of the pavement by 4 ft over the length of the entire corridor, thus making less land available for park use within the bounds of Delaware Park and the adjacent preservation district. 11 ft lanes would, along with other proposed traffic calming treatments including a median, street trees, high visibility crosswalks, etc., contribute to the desired change in character and be supportive of vehicular operating speeds at or near the 30 mph posted speed limit. |
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g. - Proposed Treatment (i.e., Recommendation):

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|---|
| Retain existing 11 ft travel lanes. Include 1 ft curb offset on the left and 3 ft curb offset on the right. |
|---|

EXHIBIT 3.3.3.2 (1) - 2
NON-STANDARD FEATURE JUSTIFICATION
(in accordance with [HDM §2.8](#))

| | | | |
|-------------------|----------------|------------------------------|--------------------------------|
| PIN: | 5470.22 | NHS (Y/N): | Yes |
| Route No. & Name: | NYS Route 198 | Functional Classification: | Urban Principal Arterial Other |
| Project Type: | Reconstruction | Design Classification: | Urban Arterial |
| % Trucks: | 2% to 5% | Terrain: | Rolling |
| ADT: | 40,000 max | Truck Access/Qualifying Hwy. | Qualifying |

a. - Description of Non-Standard Feature

| | | | |
|--|--|--------------------|--------|
| Type of Feature (e.g., horizontal curve radius): | Superelevation Rate | | |
| Location: | NYS Route 198 at Parkside Avenue Intersection | | |
| Standard Value: | 4% Maximum [3.0% required at 35 mph design speed and radius = 1,115 ft] | Design Speed: | 35 mph |
| Existing Value: | 0% | Recommended Speed: | 20 mph |
| Proposed Value: | 1% | Recommended Speed: | 20 mph |

b. - Accident Analysis

| | |
|--|---|
| Current Accident Rate: | 1.07 acc/mev (based on data from October 2011 to September 2014) |
| Statewide Rate: | 0.23 acc/mev |
| Is the non-standard feature a contributing factor? | No. Accident pattern is related to traffic signal control in the middle of an expressway (rear-end pattern) rather than loss of control during movements through the intersection. |
| Anticipated Accident Rates, Severity, and Costs: | The non-standard feature is not expected to significantly affect the accident rates, severity, or costs. Traffic signal to remain. Existing speed limit of 30 mph on all intersection approaches to remain. Vehicular operating speeds should fall between 15/20 mph (turning) and 30/35 mph after project construction. These conditions would be compatible with the proposed condition. Incremental improvement would be made. |

c. - Cost Estimates

| | |
|---------------------------------------|-------------|
| Cost to Fully Meet Standards: | \$1,400,000 |
| Cost(s) For Incremental Improvements: | \$800,000 |

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):

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| None |
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e. - Compatibility with Adjacent Segments & Future Plans:

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| The proposed superelevation rate is an incremental improvement over existing conditions and is the maximum that can be achieved while tying in to the reconstructed portions of Parkside Avenue both north and south of NYS Route 198 with minimal impacts to adjacent parkland and adjacent historic properties. The remainder of NYS Route 198, within the project limits, would meet superelevation standards upon completion of the project. |
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f. - Other Factors (e.g., Social, Economic & Environmental):

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|---|
| Raising one edge of NYS Route 198 and lowering the other to increase superelevation through the intersection would result in extended reconstruction limits and significant impacts to Delaware Park and properties in the Parkside East Historic District. Property acquisitions, excavation, and the installation of a retaining wall affecting community character would be required to meet standards. Agassiz Circle's historic layout would also be affected. |
|---|

g. - Proposed Treatment (i.e., Recommendation):

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|---|
| Include a 1% superelevation on NYS Route 198 through its intersection with Parkside Avenue. |
|---|

EXHIBIT 3.3.3.2 (1) - 3
NON-STANDARD FEATURE JUSTIFICATION
(in accordance with [HDM §2.8](#))

| | | | |
|-------------------|----------------|------------------------------|--------------------------------|
| PIN: | 5470.22 | NHS (Y/N): | Yes |
| Route No. & Name: | NYS Route 198 | Functional Classification: | Urban Principal Arterial Other |
| Project Type: | Reconstruction | Design Classification: | Urban Arterial |
| % Trucks: | 2% to 5% | Terrain: | Rolling |
| ADT: | 40,000 (max) | Truck Access/Qualifying Hwy. | Qualifying |

a. - Description of Non-Standard Feature

| | | | |
|--|--|--------------------|----------------|
| Type of Feature (e.g., horizontal curve radius): | Vertical Clearance | | |
| Location: | BIN 1039990 - Pedestrian Bridge over NYS Route 198 | | |
| Standard Value: | 15 ft, min 15.5 ft desirable | Design Speed: | Not Applicable |
| Existing Value: | 14 ft | Recommended Speed: | Not Applicable |
| Proposed Value: | 14 ft | Recommended Speed: | Not Applicable |

b. - Accident Analysis

| | |
|--|---|
| Current Accident Rate: | 1.22 acc/mvm westbound, 1.64 acc/mvm eastbound, based on October 2011 to September 2014 data. |
| Statewide Rate: | 1.06 acc/mvm |
| Is the non-standard feature a contributing factor? | No. There is no record of a vehicle striking the existing pedestrian bridge. Accidents in the vicinity of the existing pedestrian bridge were related to speed, loss of control, and roadway departure. |
| Anticipated Accident Rates, Severity, and Costs: | Retention of the non-standard vertical clearance is not expected to affect accident rates, severity, or costs. |

c. - Cost Estimates

| | |
|---------------------------------------|---|
| Cost to Fully Meet Standards: | \$2,200,000 - Pedestrian Bridge Replacement |
| Cost(s) For Incremental Improvements: | Not Applicable – vertical clearance cannot be increased to meet standards without lowering the roadway profile to the point where it would impact the footings of the existing structure. |

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):

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|---|
| None. The existing structure is not currently posted as a vertical clearance restriction. |
|---|

e. - Compatibility with Adjacent Segments & Future Plans:

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|---|
| There are no other pedestrian bridges over NYS Route 198. All proposed pedestrian crossings are at-grade. Consideration would be given to replacement, within standards, or removal of the pedestrian bridge at the end of its useful life. |
|---|

f. - Other Factors (e.g., Social, Economic & Environmental):

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| The existing pedestrian bridge is in good condition and does not require replacement. It provides a valuable and heavily used pedestrian connection across NYS Route 198 within Delaware Park. |
|--|

g. - Proposed Treatment (i.e., Recommendation):

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|---|
| Retain the existing pedestrian bridge and the existing/proposed 14 ft vertical clearance. Maximize vertical clearance to the greatest extent practicable without impacting the structure foundations during final design. |
|---|

EXHIBIT 3.3.3.2 (1) - 4
NON-STANDARD FEATURE JUSTIFICATION
(in accordance with [HDM §2.8](#))

| | | | |
|-------------------|---------------------------|------------------------------|----------------------|
| PIN: | 5470.22 | NHS (Y/N): | Yes |
| Route No. & Name: | Delaware Avenue Connector | Functional Classification: | Urban Minor Arterial |
| Project Type: | Reconstruction | Design Classification: | Urban Arterial |
| % Trucks: | 2% | Terrain: | Rolling |
| ADT: | 15,200 | Truck Access/Qualifying Hwy. | No |

a. - Description of Non-Standard Feature

| | | | |
|--|--|--------------------|--------|
| Type of Feature (e.g., horizontal curve radius): | Horizontal Curvature (Curve DC-1) | | |
| Location: | Delaware Avenue Connector immediately south of NYS Route 198 | | |
| Standard Value: | 250 ft | Design Speed: | 30 mph |
| Existing Value: | N/A | Recommended Speed: | N/A |
| Proposed Value: | 197 ft | Recommended Speed: | 25 mph |

b. - Accident Analysis

| | |
|--|---|
| Current Accident Rate: | N/A – New Facility |
| Statewide Rate: | 2.69 Acc/mvm (4 lanes, divided) |
| Is the non-standard feature a contributing factor? | No |
| Anticipated Accident Rates, Severity, and Costs: | Accident rate is expected to be at or below the statewide average for similar facilities. |

c. - Cost Estimates

| | |
|---------------------------------------|----------------|
| Cost to Fully Meet Standards: | \$150,000 |
| Cost(s) For Incremental Improvements: | Not Applicable |

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):

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|------|
| None |
|------|

e. - Compatibility with Adjacent Segments & Future Plans:

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|---|
| There are no adjacent segments or future plans to widen or extend this roadway. |
|---|

f. - Other Factors (e.g., Social, Economic & Environmental):

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|---|
| Expanding the radius would require the acquisition of additional parkland, impact vehicular storage length in the eastbound right turn lane, move the intersection toward the historic Delaware Avenue Bridge, and require the southwestern curb radius to be widened which would extend the length of the pedestrian crossing. A speed of 25 mph would be compatible with vehicular turning movements coming from and going to NYS Route 198. Vehicles would not be able to reach substantially higher speeds on the roadway given the relatively short (394-foot) length. |
|---|

g. - Proposed Treatment (i.e., Recommendation):

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| Include a horizontal curve with a 197-foot radius on the proposed Grant Street Connector |
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EXHIBIT 3.3.3.2 (1) - 5
NON-STANDARD FEATURE JUSTIFICATION
(in accordance with [HDM §2.8](#))

| | | | |
|-------------------|------------------------------------|------------------------------|---------------------------------|
| PIN: | 5470.22 | NHS (Y/N): | Yes |
| Route No. & Name: | Delaware Avenue (NYS Route 384) | Functional Classification: | Urban Principal Arterial Other |
| Project Type: | Reconstruction | Design Classification: | Urban Arterial |
| % Trucks: | 2% | Terrain: | Rolling |
| ADT: | 31,500 | Truck Access/Qualifying Hwy. | Access (North of NYS Route 198) |

a. - Description of Non-Standard Feature

| | | | |
|--|--|--------------------|--------|
| Type of Feature (e.g., horizontal curve radius): | Horizontal Curvature (Curve DS-3) | | |
| Location: | Delaware Avenue Southbound, just south of Nottingham Terrace | | |
| Standard Value: | 711 ft | Design Speed: | 45 mph |
| Existing Value: | 427 ft | Recommended Speed: | 39 mph |
| Proposed Value: | 443 ft | Recommended Speed: | 40 mph |

b. - Accident Analysis

| | |
|--|--|
| Current Accident Rate: | 0.35 acc/mvm, two-way(based on data from October 2011 to September 2014) |
| Statewide Rate: | 1.09 Acc/mvm |
| Is the non-standard feature a contributing factor? | No, recorded southbound accidents involved a combination of poor weather conditions and/or reaction to the actions of another vehicle. |
| Anticipated Accident Rates, Severity, and Costs: | Retention of a non-standard horizontal curvature is not expected to significantly affect the accident rates, severity, or costs. |

c. - Cost Estimates

| | |
|---------------------------------------|---|
| Cost to Fully Meet Standards: | \$5,000,000 for replacement of adjacent historic bridge structure |
| Cost(s) For Incremental Improvements: | Estimated \$50,000 to \$100,000 |

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):

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|------|
| None |
|------|

e. - Compatibility with Adjacent Segments & Future Plans:

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|--|
| The proposed horizontal curvature is consistent with the adjacent segments of Delaware Avenue and represents an incremental improvement over the existing condition which was put in place in 1997. It is also consistent with the 30 mph speed limit on this segment of Delaware Avenue. There are no future plans to widen, reconstruct, or realign this segment of Delaware Avenue. |
|--|

f. - Other Factors (e.g., Social, Economic & Environmental):

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|--|
| The purpose of this feature is to match the existing alignment of Delaware Avenue (NYS Route 384) at the Nottingham Terrace intersection and beneath the existing NYS Route 198 bridge over Delaware Avenue, which is historically significant. The historic bridge would be impacted by a change to meet standards.\$1.6 M was recently spent on a project to rehabilitate the structure. |
|--|

g. - Proposed Treatment (i.e., Recommendation):

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| Include a 443 ft horizontal curvature on Delaware Avenue (NYS Route 384) southbound between Nottingham Terrace and the historic NYS Route 198 bridge over Delaware Avenue. |
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EXHIBIT 3.3.3.2 (1) - 6
NON-STANDARD FEATURE JUSTIFICATION
(in accordance with [HDM §2.8](#))

| | | | |
|-------------------|------------------------------------|------------------------------|---------------------------------|
| PIN: | 5470.22 | NHS (Y/N): | Yes |
| Route No. & Name: | Delaware Avenue (NYS Route 384) | Functional Classification: | Urban Principal Arterial Other |
| Project Type: | Reconstruction | Design Classification: | Urban Arterial |
| % Trucks: | 2% | Terrain: | Rolling |
| ADT: | 31,500 | Truck Access/Qualifying Hwy. | Access (North of NYS Route 198) |

a. - Description of Non-Standard Feature

| | | | |
|--|---------------------|--------------------|--------|
| Type of Feature (e.g., horizontal curve radius): | Superelevation Rate | | |
| Location: | Delaware Avenue | | |
| Standard Value: | 4% Maximum | Design Speed: | 45 mph |
| Existing Value: | 2% Maximum | Recommended Speed: | 35 mph |
| Proposed Value: | 2% Maximum | Recommended Speed: | 35 mph |

b. - Accident Analysis

| | |
|--|--|
| Current Accident Rate: | 0.35 acc/mvm, two-way (based on data from October 2011 to September 2014) |
| Statewide Rate: | 1.09 Acc/mvm |
| Is the non-standard feature a contributing factor? | No, recorded southbound accidents involved a combination of poor weather conditions and/or reaction to the actions of another vehicle. |
| Anticipated Accident Rates, Severity, and Costs: | Retention of a non-standard superelevation is not expected to significantly affect the accident rates, severity, or costs. |

c. - Cost Estimates

| | |
|---------------------------------------|---|
| Cost to Fully Meet Standards: | \$5,000,000 for replacement of adjacent historic bridge structure |
| Cost(s) For Incremental Improvements: | Not Applicable |

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):

| |
|------|
| None |
|------|

e. - Compatibility with Adjacent Segments & Future Plans:

| |
|--|
| The proposed superelevation is consistent with the adjacent segments of Delaware Avenue and was put in place in 1997. It is also consistent with the 30 mph speed limit on this segment of Delaware Avenue. There are no future plans to widen, reconstruct, or realign this segment of Delaware Avenue. |
|--|

f. - Other Factors (e.g., Social, Economic & Environmental):

| |
|--|
| The purpose of this feature is to match the existing alignment of Delaware Avenue (NYS Route 384) at the Nottingham Terrace intersection, beneath the existing NYS Route 198 bridge over Delaware Avenue (which is historically significant), and south of the proposed intersection with the Delaware Avenue Connector. The historic bridge would be impacted by a change to meet standards. The cut and fill required to attain a 4% superelevation would impact the foundations of the adjacent historic Delaware Avenue bridge. \$1.6 M was recently spent on a project to rehabilitate the structure. |
|--|

g. - Proposed Treatment (i.e., Recommendation):

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|---|
| Retain the existing 2% maximum superelevation rate on Delaware Avenue |
|---|

EXHIBIT 3.3.3.2 (1) - 7
NON-STANDARD FEATURE JUSTIFICATION
(in accordance with [HDM §2.8](#))

| | | | |
|--|--|------------------------------|---------------------------------|
| PIN: | 5470.22 | NHS (Y/N): | Yes |
| Route No. & Name: | Delaware Avenue (NYS Route 384) | Functional Classification: | Urban Principal Arterial Other |
| Project Type: | Reconstruction | Design Classification: | Urban Arterial |
| % Trucks: | 2% | Terrain: | Rolling |
| ADT: | 31, 500 | Truck Access/Qualifying Hwy. | Access (North of NYS Route 198) |
| a. - Description of Non-Standard Feature | | | |
| Type of Feature (e.g., horizontal curve radius): | Stopping Sight Distance | | |
| Location: | Under BIN 1047259 - NYS Route 198 over Delaware Avenue | | |
| Standard Value: | 360 ft (min) | Design Speed: | 45 mph |
| Existing Value: | 278 ft | Recommended Speed: | 37 mph |
| Proposed Value: | 278 ft | Recommended Speed: | 37 mph |
| b. - Accident Analysis | | | |
| Current Accident Rate: | 0.35 acc/mvm, two-way(based on data from October 2011 to September 2014) | | |
| Statewide Rate: | 1.09 Acc/mvm | | |
| Is the non-standard feature a contributing factor? | No, recorded southbound accidents involved a combination of poor weather conditions and/or reaction to the actions of another vehicle. There were no rear-end accidents in the data. | | |
| Anticipated Accident Rates, Severity, and Costs: | Retention of a non-standard stopping sight distance is not expected to significantly affect the accident rate, severity, or costs. | | |
| c. - Cost Estimates | | | |
| Cost to Fully Meet Standards: | \$5,000,000 for historic bridge replacement | | |
| Cost(s) For Incremental Improvements: | Not Applicable | | |
| d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius): | | | |
| | None | | |
| e. - Compatibility with Adjacent Segments & Future Plans: | | | |
| | The proposed stopping sight distance would remain consistent with the existing and adjacent segments. | | |
| f. - Other Factors (e.g., Social, Economic & Environmental): | | | |
| | The existing condition was put in place in 1997. Reconstruction to meet standards would impact the foundations of the existing historic structure. \$1.6 M was recently spent on a project to rehabilitate the structure's stone facing. The existing roadway is lighted. There is also lighting beneath the bridge. | | |
| g. - Proposed Treatment (i.e., Recommendation): | | | |
| | Retain the existing 278-foot stopping sight distance. | | |

EXHIBIT 3.3.3.2 (1) - 8
NON-STANDARD FEATURE JUSTIFICATION
(in accordance with [HDM §2.8](#))

| | | | |
|-------------------|------------------------------------|------------------------------|---------------------------------|
| PIN: | 5470.22 | NHS (Y/N): | Yes |
| Route No. & Name: | Delaware Avenue (NYS Route 384) | Functional Classification: | Urban Principal Arterial Other |
| Project Type: | Reconstruction | Design Classification: | Urban Arterial |
| % Trucks: | 2% | Terrain: | Rolling |
| ADT: | 31500 | Truck Access/Qualifying Hwy. | Access (North of NYS Route 198) |

a. - Description of Non-Standard Feature

| | | | |
|--|--|--------------------|----------------|
| Type of Feature (e.g., horizontal curve radius): | Vertical Clearance | | |
| Location: | BIN 1047259 - NYS Route 198 over Delaware Avenue | | |
| Standard Value: | 14 ft min, 14.5 ft desirable | Design Speed: | Not Applicable |
| Existing Value: | 13 ft | Recommended Speed: | Not Applicable |
| Proposed Value: | 13 ft | Recommended Speed: | Not Applicable |

b. - Accident Analysis

| | |
|--|--|
| Current Accident Rate: | 0.35 acc/mvm, two-way(based on data from October 2011 to September 2014) |
| Statewide Rate: | |
| Is the non-standard feature a contributing factor? | 1.09 Acc/mvm |
| Anticipated Accident Rates, Severity, and Costs: | No, recorded southbound accidents involved a combination of poor weather conditions and/or reaction to the actions of another vehicle. There were no bridge-hit accidents in the data. |
| | Retention of a non-standard vertical clearance is not expected to significantly affect the accident rate, severity, or costs. |

c. - Cost Estimates

| | |
|---------------------------------------|---|
| Cost to Fully Meet Standards: | \$5,000,000 for historic bridge replacement |
| Cost(s) For Incremental Improvements: | Not Applicable |

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):

| | |
|--|---|
| | Retain/replace the existing vertical clearance signs. |
|--|---|

e. - Compatibility with Adjacent Segments & Future Plans:

| | |
|--|--|
| | The proposed vertical clearance would remain consistent with the existing and adjacent segments. |
|--|--|

f. - Other Factors (e.g., Social, Economic & Environmental):

| | |
|--|--|
| | The existing condition was put in place in 1997. Reconstruction to meet standards would impact the foundations of the existing historic structure. \$1.6 M was recently spent on a project to rehabilitate the structure's stone facing. |
|--|--|

g. - Proposed Treatment (i.e., Recommendation):

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|--|---|
| | Retain the existing 13-foot vertical clearance and signs. |
|--|---|

EXHIBIT 3.3.3.2 (1) - 9
NON-STANDARD FEATURE JUSTIFICATION
(in accordance with [HDM §2.8](#))

| | | | |
|-------------------|----------------|------------------------------|--------------------|
| PIN: | 5470.22 | NHS (Y/N): | No |
| Route No. & Name: | Agassiz Circle | Functional Classification: | Local Urban Street |
| Project Type: | Reconstruction | Design Classification: | Local Urban Street |
| % Trucks: | 2% | Terrain: | Rolling |
| ADT: | 500 | Truck Access/Qualifying Hwy. | No |

a. - Description of Non-Standard Feature

| | | | |
|--|-----------------------------------|--------------------|--------|
| Type of Feature (e.g., horizontal curve radius): | Horizontal Curvature (Curve HP-1) | | |
| Location: | Agassiz Circle | | |
| Standard Value: | 250 ft | Design Speed: | 30 mph |
| Existing Value: | 217 ft | Recommended Speed: | 25 mph |
| Proposed Value: | 217 ft | Recommended Speed: | 25 mph |

b. - Accident Analysis

| | |
|--|--|
| Current Accident Rate: | No recorded accidents in data from October 2011 to September 2014. |
| Statewide Rate: | 2.29 Acc/mvm (2 lanes) |
| Is the non-standard feature a contributing factor? | No accidents. |
| Anticipated Accident Rates, Severity, and Costs: | Retention of a non-standard horizontal curvature is not expected to significantly affect the accident rates, severity, or costs. |

c. - Cost Estimates

| | |
|---------------------------------------|----------------|
| Cost to Fully Meet Standards: | \$500,000 |
| Cost(s) For Incremental Improvements: | Not Applicable |

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):

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|------|
| None |
|------|

e. - Compatibility with Adjacent Segments & Future Plans:

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|--|
| The proposed horizontal curvature is consistent with adjacent segments of Agassiz Circle. There are no future plans to extend or widen this roadway. |
|--|

f. - Other Factors (e.g., Social, Economic & Environmental):

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|--|
| Agassiz Circle is located at the project work limit and would undergo reconstruction to tie into Parkside Avenue at the NYS Route 198 intersection. The geometry dates back to the original roadway system in and around Delaware Park. Enlarging the curve to meet current standards would alter the historic alignment of Agassiz Circle and bring its intersection with Parkside Avenue closer to NYS Route 198. It would also affect an historic property at 23 Agassiz Circle. Vehicular speeds on this segment of roadway are relatively low given the park surroundings, on-street parking, connecting driveways, and the need to stop before turning right on Parkside Avenue. |
|--|

g. - Proposed Treatment (i.e., Recommendation):

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|--|
| Retain the existing 216-foot horizontal curvature on Agassiz Circle. |
|--|

EXHIBIT 3.3.3.2 (1) - 10
NON-STANDARD FEATURE JUSTIFICATION
(in accordance with [HDM §2.8](#))

| | | | |
|-------------------|------------------|------------------------------|--------------------|
| PIN: | 5470.22 | NHS (Y/N): | No |
| Route No. & Name: | Humboldt Parkway | Functional Classification: | Local Urban Street |
| Project Type: | Reconstruction | Design Classification: | Local Urban Street |
| % Trucks: | 2% | Terrain: | Rolling |
| ADT: | 500 | Truck Access/Qualifying Hwy. | No |

a. - Description of Non-Standard Feature

| | | | |
|--|--|--------------------|--------|
| Type of Feature (e.g., horizontal curve radius): | Horizontal Curvature (Curve HP-2) | | |
| Location: | Humboldt Parkway (westbound) at Agassiz Circle | | |
| Standard Value: | 250 ft | Design Speed: | 30 mph |
| Existing Value: | 56 ft | Recommended Speed: | 15 mph |
| Proposed Value: | 56 ft | Recommended Speed: | 15 mph |

b. - Accident Analysis

| | |
|--|--|
| Current Accident Rate: | No recorded accidents in data from October 2011 to September 2014. |
| Statewide Rate: | 2.29 Acc/mvm (2 lanes) |
| Is the non-standard feature a contributing factor? | No accidents. |
| Anticipated Accident Rates, Severity, and Costs: | Retention of a non-standard horizontal curvature is not expected to significantly affect the accident rates, severity, or costs. |

c. - Cost Estimates

| | |
|---------------------------------------|----------------|
| Cost to Fully Meet Standards: | \$750,000 |
| Cost(s) For Incremental Improvements: | Not Applicable |

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):

| |
|------|
| None |
|------|

e. - Compatibility with Adjacent Segments & Future Plans:

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|---|
| The proposed horizontal curvature is consistent with the adjacent segments of Humboldt Parkway and Agassiz Circle. There are no future plans to extend or widen this roadway. |
|---|

f. - Other Factors (e.g., Social, Economic & Environmental):

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|---|
| Humboldt Parkway is located at the project work limit and would undergo reconstruction to tie into Agassiz Circle and to accommodate adjacent changes to NYS Route 198. Enlarging the curve to meet current standards would require the acquisition of up to two residential properties along the north side of Humboldt Parkway. A larger curve would also promote higher operating speeds inconsistent with the urban surroundings, downstream curvature on Agassiz Circle, and downstream stop sign at Parkside Avenue. A change would also modify the layout of roadways that have existed in and around Delaware Park since it was originally constructed. |
|---|

g. - Proposed Treatment (i.e., Recommendation):

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|--|
| Retain the existing 56-foot horizontal curvature on Humboldt Parkway where it meets Agassiz Circle |
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